CLAIMS

We claim:

1. A method for providing high speed, digital telecommunications service from a site of an existing telecommunications serving area interface comprising a first enclosure wherein subscriber lines are cross-connected to a telecommunications trunk to provide voice telecommunications services to subscribers through said subscriber lines, the method comprising the steps of:

providing an enlarged enclosure at the site of said first enclosure;

incorporating into said enlarged enclosure, along with feeder and distribution blocks, a broadband electronic multiplexer connected to a provider through a high-speed interface; and

connecting said multiplexer through plural data connections to said distribution blocks, thereby providing high speed, digital telecommunications service at least to selected ones of said subscribers.

2. A method for providing digital subscriber line service from a site of an existing telecommunications serving area interface comprising a first enclosure wherein subscriber lines are cross-connected to a telecommunications trunk to provide voice telecommunications services to subscribers through said subscriber lines, the method comprising the steps of:

providing an enlarged enclosure at the site of said first enclosure;

incorporating into said enlarged enclosure, along with feeder and distribution blocks, a digital subscriber line access multiplexer connected to a digital subscriber line provider through a high-speed interface; and

connecting said digital subscriber line access multiplexer through plural data connections to said distribution blocks, thereby providing digital subscriber line service at least to selected ones of said subscribers.

3. A method of retrofitting a telecommunications serving area interface comprising an enclosure, and feeder and

distribution blocks within said enclosure, the distribution blocks being connected to a plurality of subscribers through subscriber lines, the feeder blocks being connected to a telecommunications trunk, and the feeder and distribution blocks being cross-connected to provide voice telecommunications services to said subscribers, the method comprising the steps of:

providing an enlarged enclosure containing said feeder and distribution blocks;

incorporating into said enlarged enclosure, along with said feeder and distribution blocks, a digital subscriber line access multiplexer connected to a digital subscriber line provider through a high-speed interface; and

connecting said digital subscriber line access multiplexer through plural data connections to said distribution blocks for providing digital subscriber line service at least to selected ones of said subscribers.

4. The method according to claim 3, wherein the step of incorporating a digital subscriber line access multiplexer into said enlarged enclosure includes the step of incorporating additional distribution blocks into said enlarged enclosure.

5. The method according to claim 3, wherein the step of incorporating a digital subscriber line access multiplexer into said enlarged enclosure includes the step of incorporating additional feeder blocks into said enlarged enclosure.

6. The method according to claim 3, wherein the step of incorporating a digital subscriber line access multiplexer into said enlarged enclosure includes the step of incorporating additional distribution and feeder blocks into said enlarged enclosure.

7. A method of retrofitting a conventional telecommunications serving area interface to incorporate digital subscriber line service comprising removing an existing cross-connect cabinet, and substituting for the removed cabinet a new cross-connect cabinet the interior of which contains two compartments, one compartment containing feeder and distribution blocks, and the other of the two compartments containing a

digital subscriber line access multiplexer and a splitter connected to said access multiplexer, and providing interconnections between the splitter in said other compartment and the feeder and distribution blocks in the one compartment.

8. A telecommunications interface comprising:
an enclosure;
feeder and distribution blocks within said enclosure, the distribution blocks being connected to a plurality of subscribers through subscriber lines, the feeder blocks being connected to a telecommunications trunk, and the feeder and distribution blocks being cross-connected to provide voice telecommunications services to said subscribers; and
a broadband electronic multiplexer connected to a provider through a high-speed interface, and being connected through plural data connections to said distribution blocks for providing high speed, digital telecommunications service at least to selected ones of said subscribers;
wherein the multiplexer is also located within said enclosure along with said feeder and distribution blocks.

9. A telecommunications interface comprising:
an enclosure;
feeder and distribution blocks within said enclosure, the distribution blocks being connected to a plurality of subscribers through subscriber lines, the feeder blocks being connected to a telecommunications trunk, and the feeder and distribution blocks being cross-connected to provide voice telecommunications services to said subscribers; and
a digital subscriber line access multiplexer connected to a digital subscriber line provider through a high-speed interface, and being connected through plural data connections to said distribution blocks for providing digital subscriber line service at least to selected ones of said subscribers.

10. The telecommunications interface according to Claim 9 wherein the digital subscriber line access multiplexer is also

located within said enclosure along with said feeder and distribution blocks.

11. The telecommunications interface according to claim 9, including a splitter within said enclosure, wherein the digital subscriber line access multiplexer is connected to the splitter, and wherein at least selected terminals of the feeder blocks are also connected to the splitter.

12. The telecommunications interface according to Claim 11 wherein said plural data connections to said distribution blocks are constituted by connections from the splitter to the distribution blocks, whereby selected subscribers connected to said distribution blocks are provided with both voice and digital subscriber line service over the same subscriber lines.

13. The telecommunications interface according to claim 9, in which the enclosure is divided into plural, separate compartments, a first of said compartments containing said feeder and distribution blocks, and a second of said compartments containing said digital subscriber line access multiplexer.

14. The telecommunications interface according to Claim 13 wherein said blocks being accessible for cross-connection through an opening in the enclosure through which the multiplexer is not accessible, and said multiplexer being accessible through an opening in said enclosure through which said blocks are not accessible for cross-connection, in which said plural data connections extend from the first compartment to the second compartment.

15. The telecommunications interface according to Claim 14, whereby digital subscriber line service can be provided to subscribers by cross-connections made solely in said first compartment.

16. The telecommunications interface according to claim 9, in which the enclosure is divided into plural compartments containing at least one of a following element from a list comprising:

said feeder and distribution blocks; and
said digital subscriber line access multiplexer.

17. The telecommunications interface according to Claim 16 wherein said blocks being accessible for cross-connection through an opening in the enclosure through which the multiplexer is not accessible, and said multiplexer being accessible through an opening in said enclosure through which said blocks are not accessible for cross-connection, in which said plural data connections extend from the first compartment to the second compartment.

18. The telecommunications interface according to Claim 17, wherein the number of said plural connections exceeds the number of said selected ones of said subscribers, whereby digital subscriber line service can be provided to additional subscribers by cross-connections made solely in said first compartment.

19. The telecommunications interface according to Claim 16, in which said compartments are separately lockable, whereby access to one compartment can be denied to an individual worker who is permitted access to the other compartment.

20. A telecommunications interface comprising:
a splitter within an enclosure, wherein the digital subscriber line access multiplexer is connected to the splitter, wherein at least selected terminals of feeder blocks are also connected to the splitter, wherein plural data connections to distribution blocks are constituted by connections from the splitter to the distribution blocks whereby selected subscribers connected to said distribution blocks are provided with both voice and digital subscriber line service over the same subscriber lines, and in which the enclosure is divided into plural, separate compartments, a first of said compartments containing said feeder and distribution blocks, and a second of said compartments containing said digital subscriber line access multiplexer and said splitter.

21. The telecommunications interface according to Claim 20, wherein said blocks being accessible for cross-connection through an opening in the enclosure through which the

multiplexer and splitter are not accessible, and said multiplexer and splitter being accessible through an opening in said enclosure through which said blocks are not accessible for cross-connection.

22. The telecommunications interface according to Claim 21 in which said plural data connections extend from said first compartment to said second compartment, and including plural voice connections from said feeder blocks in said first compartment to said splitter in said second compartment, whereby digital subscriber line service, and combined voice and digital subscriber line service, can be provided to subscribers by cross-connections made solely in said first compartment.

23. A telecommunications enclosure comprising:

a feeder block;

a distribution block;

subscriber lines coupled to the distribution block; and

a digital subscriber line access multiplexer coupled to the feeder block;

wherein the feeder block and the distribution block are cross-connected to provide voice telecommunications services to said subscribers; and

wherein the digital subscriber line access multiplexer is connected to a digital subscriber line provider adapted to provide digital subscriber line service at least to selected ones of said subscribers.

24. The telecommunications enclosure of claim 23, wherein the feeder block is coupled to a DLC cabinet exterior to the enclosure.